

CASE NO. 12cv47

ATTACHMENT NO. 6

EXHIBIT _____

TAB DESCRIPTION _____

of an inability to exercise normal controls, behavior becomes disruptive and may consist of either excesses or deficits. Some authors have suggested that in some cases, these changes may actually represent preexisting tendencies that were simply not given public expression (Lishman, 1987). Therefore, premorbid personality traits may be accentuated, and emotions, behaviors, and basic drives of sexuality and aggressiveness may emerge (Bond, 1984). In other instances, personality changes may be striking, with the appearance of inappropriate behavior that is completely uncharacteristic of the individual prior to the onset of the disorder.

The effects of impulsivity in neurobehavioral disorders may be seen across areas of functioning that include cognition, behavior, and emotional expression. The impact on cognition leads to a change in functioning that may be characterized by a failure to consider, review, or appreciate the nature of one's actions. Poor judgment is common, as are limited insight, diminished self-monitoring capability, and a lack of concern about the impact of one's actions on others.

Behavioral changes consist of inattention, distractibility, increased psychomotor activity, and a wide range of inappropriate actions and comments. Indeed, the deterioration of social behavior and diminished awareness of the needs and feelings of others may be the first noticeable symptom of neurological disease and the most distressing to family and friends. The individual becomes indifferent about the consequences of his or her behavior and exhibits a decreased ability to appreciate the impact of that behavior on others. In interpersonal interactions, there may be a lack of normal, adult restraint and tact and a weakening of ethical controls. In addition, the individual may become sexually preoccupied, which may manifest itself through lewd comments, inappropriate sexual advances, promiscuity, or perverse behavior.

Emotional expression is labile because of an inability to modulate or control the expression of feelings. Thoughts and emotions ranging from irritability to jocularity to euphoria may readily surge to the surface and be spontaneously expressed. Aggressive acts are also common, and even minor provocation may result in sudden outbursts of violence. All of these changes within the spheres of cognition, behavior, and emotion are usually compounded by the individual's lack of awareness of any difficulty (anosognosia) and subsequent inability to acknowledge deficits or changes.

NEUROPSYCHOLOGICAL CAUSES OF BEHAVIORAL DYSREGULATION

Disordered behavioral control can result from pathology at any level of the CNS (Woodcock, 1986). Hence, impulsivity is a frequent com-

TABLE 1
Neurobehavioral Disorders Presenting With Impulsivity as a Primary Symptom or Major Feature

Etiology	Diagnosis
Degenerative diseases	Frontal lobe dementias, Huntington's chorea, and Alzheimer's disease
Infectious diseases	General paresis and AIDS
Trauma	Closed-head injury and penetrating wounds
Vascular	Particularly frontal lesions
Temporal neoplasms	Particularly frontal and lobe tumors
Metabolic	Wilson's disease and hepatic disease
Temporal neurosurgery	Particularly frontal and lobes
Organic personality syndromes	Pseudopsychopathic personality disorder and episodic dyscontrol syndrome

Note. AIDS = acquired immunodeficiency syndrome.

ponent in a wide range of neurological disorders, including degenerative diseases, trauma, neoplasms, metabolic disorders, infectious disease, vascular disorders, and neurosurgery. Additionally, a host of other disorders with varying etiologies may be present with impulsivity as an associated feature, although our discussion is limited to only those major areas listed in Table 1.

Inasmuch as the pathological effects of cerebral insult on personality are not well-known, specific anatomical-behavioral correlations are often speculative. Despite this, there are several well-documented areas of cerebral involvement frequently associated with changes in behavior and personality. In particular, frontal lobe lesions may produce personality changes with a fairly well-recognized pattern of behavior, frequently with impulsivity as a typical feature (Lishman, 1987).

Lesions in the diencephalon and brain stem may also produce symptoms similar to those observed in frontal lobe lesions, including behavioral disinhibition (Lishman, 1987). A lack of social concern and sudden outbursts of violence are characteristic in hypothalamic lesions. In addition, lesions involving the thalamus, midbrain, and pons have been implicated in personality changes that include behavioral and emotional dyscontrol (Elliott, 1986). For example, Strub and Black (1981) discussed an atypical presentation of an Alzheimer's type of dementia (DAT) with hyperactivity and uninhibited, impulsive behavior. At autopsy, their patients were found to have considerable atrophy of the locus coeruleus that was likely caused by a noradrenergic deficit. Thus, personality

changes and an increase in impulsive tendencies can be associated with varying areas and different processes within the brain.

Frontal Lobe Syndromes and Impulsivity

Although behavioral and affective changes may occur with cerebral insult to a number of areas, damage to the frontal lobes is particularly implicated in personality changes (Lishman, 1987). Conditions producing damage to this region have been known to lead to dramatic changes in personality and behavior that may be the most prominent aspect of the patient's presentation (Cummings, 1985).

There is a general consensus that damage to this area leads to readily identifiable changes in emotions, behavior, and cognition (Lipowski, 1978). The "frontal syndrome" is a constellation of symptoms used to refer to a heterogeneous group of disorders producing such personality and behavioral changes. Typical features include impulsivity, disinhibition, emotional lability, irresponsibility, lack of concern and tact, poor judgment, and occasional marked aggressiveness. Although damage to one lobe may produce an alteration in personality, bilateral lesions result in the most severe changes, particularly those involving the orbital and frontal areas of the brain (Lishman, 1987). Damage to this area is thought to interfere with the frontal monitoring system by disrupting the connections between the limbic system, thalamus, and frontal convexity (Cummings, 1985). The result is a disinhibited behavioral syndrome, with impulsivity as the outstanding feature.

In frontal lobe syndromes, the individual exhibits a "coarsening of the personality" (Cummings, 1985), and impulses are acted on without consideration of the consequences. In a study of 20 patients with frontal lobe dysfunction admitted to a psychiatric facility, McAllister and Price (1987) noted that disinhibited behavior coupled with affective lability were the primary symptoms leading to admission. Indeed, because of the predominant symptoms in personality and behavior, the term *pseudopsychopathic* (Blumer & Benson, 1975) was coined to describe the changes associated with frontal lobe damage.

Numerous disorders and diseases may result in damage to the frontal lobes, including neoplasms, degenerative diseases, cerebral vascular accidents, and traumatic damage from neurosurgery, penetrating wounds, or closed-head injuries.

Trauma

Trauma is a common cause of frontal lobe dysfunction, particularly open-head injuries produced by high-velocity missile wounds. Such injuries may result in relatively localized damage, leaving the individual with primarily behavioral and personality deficits while other functioning re-

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mains intact. The earliest and perhaps best known case of frontal lobe dysfunction resulting from a missile wound is that of Phineas Gage, a 25-year-old railroad worker described by Harlow in 1848. Mr. Gage suffered a penetrating bifrontal injury when an iron rod was accidentally dynamited through his skull. Although his physical recovery was good and his cognitive functioning remained grossly intact, major personality and behavioral changes ensued. Specifically, he became impulsive, emotionally labile, insightless, and inconsiderate (Harlow, 1868). Although disturbing to those who knew him to be a formerly pleasant and well-controlled individual, the patient himself remained unconcerned regarding these changes.

Jarvie (1954) found disinhibition to be the central feature of the mental status changes in a study of 6 patients with frontal head wounds. He argued that disinhibition could be conceptualized as a primary release phenomenon that unleashes changes in behavior, affect, and cognition. He observed that despite relatively spared intellect, these patients' main difficulty was the loss of ability to control abrupt shifts in mood, basic drives, and behavior. He further observed lack of insight into these changes and difficulties.

Closed-Head Injury

Closed-head injury, which is frequently caused by motor vehicle accidents, is a common cause of frontal lobe dysfunction. In particular, damage to the orbital aspect of the frontal lobes frequently results in personality and behavioral changes, with disinhibition as the outstanding feature. These patients are often impulsive, lack tact and concern, have reduced control, and may engage in antisocial acts. Sexual preoccupation is common, and conversation may be punctuated with inappropriate sexual comments. The following case history illustrates the effects of a closed-head injury on impulsive behavior.

Case 1. A 20-year-old man involved in a motor vehicle accident sustained a closed-head injury to the frontal-orbital region. During the course of rehabilitation, his behavior was characterized by marked impulsivity that was often aggressive. His impulsiveness and lack of control resulted in immature behavior, constant childish demands, and episodes of unexpected belligerence that quickly dissipated once he was removed from the situation. On formal testing, he obtained a Wechsler Adult Intelligence Scale-Revised (WAIS-R; Wechsler, 1981) Full Scale score of 71, a Verbal scale score of 75, and a Performance scale score of 67; he also had a severe impairment in memory, as indicated by a Wechsler Memory Scale-Revised (WMS-R; Wechsler, 1987) score of 52. Although his cognitive and memory functioning showed gradual improvement over time, personality and behavioral changes persisted. Indeed, these posed the greatest barrier

Negative Family Environment as a Predictor of Boys' Future Status on Measures of Hostile Attitudes, Interview Behavior, and Anger Expression

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The present study tested the hypothesis that family environments characterized as nonsupportive, unaccepting, and conflictual lead to the development of hostile traits in adolescent Caucasian boys. Negative behaviors during parent-son discussions aimed at resolving disagreements were observed in a laboratory setting in 51 intact families. Sons' hostile traits were assessed at the time of the interactions and then 3 years later. Results showed that a high frequency of negative behaviors exhibited by both parents and sons predicted sons' later hostile attitudes and outward expression of anger after adjustment for their initial level of hostile attitudes and anger expression, respectively. A low frequency of positive behaviors exhibited by the father and son predicted sons' later Potential for Hostility ratings after adjustment for their initial level. The meaning of these findings for the conceptualization of hostility is discussed.

Key words: development, hostility, anger, family environment, longitudinal

Anger and hostility have long been suspected to contribute to the development of coronary artery disease and hypertension (Diamond, 1982). Currently, the hostility component of the Type A behavior pattern is considered to be the major contributor to its associated risk for coronary heart disease (CHD; Dembroski & Costa, 1987). Clinical ratings of Potential for Hostility that are based on behavioral responses during the Type A Structured Interview (SI) predict not only CHD incidence in men (Dembroski, MacDougall, Costa, & Grands, 1989; Hecker, Chesney, Black, & Frautschi, 1988; Matthews, Glass, Rosenman, & Bortner, 1977) but also severity of coronary artery disease in patients undergoing angiography (e.g., Dembroski, MacDougall, Williams, Haney, & Blumenthal, 1985). Furthermore, scores from the subset of Minnesota Multiphasic Personality Inventory (MMPI) items that measure mistrustful attitudes, called the Cook-Medley Hostility (Ho) scale (Cook & Medley, 1954), predict CHD incidence as well as total mortality (Smith, 1992). However, there have been failures to replicate those associations, and prospective studies using the Ho scale have almost exclusively included men.

Interventions to reduce hostile persons' high risk for CHD depend in part on our ability to understand the early contributors to and pathogenic processes associated with the development

ment of high levels of hostility. Although early signs of atherosclerosis do not appear until late adolescence in young men, biological and psychological risk factors for CHD are relatively stable in pediatric populations (Berenson, 1980), which makes studies of the early manifestations of hostile characteristics in children warranted.

It has been proposed that family environments that are characterized as nonsupportive, unaccepting, and conflictual contribute to the development of hostility (Houston & Vavak, 1991; Smith, Pope, Sanders, Allred, & O'Keefe, 1988; Woodall & Matthews, 1989). Indeed, undergraduates who reported mistrusting others on the Ho scale recalled their family environments as being less cohesive and supportive and more conflictual (Houston & Vavak, 1991; Smith et al., 1988). Children who received high clinical ratings on Potential for Hostility (Siegel & Leitch, 1981) and who reported expressing anger outwardly on the Anger-Out scale of Spielberger's Anger Expression Scale (Spielberger et al., 1985) or having mistrustful attitudes toward others on the Ho scale had parents who described their family environment as low in cohesiveness on the Family Environment Survey (FES; Moos & Moos, 1981; Woodall & Matthews, 1989). Scores on the Spielberger Anger-In scale were unrelated to perceptions of the family environment (Woodall & Matthews, 1989). In a 4-year longitudinal study of children and adolescents, children's follow-up Ho scores and boys' clinical ratings on Potential for Hostility, after being adjusted for initial scores, were predicted by a decrease from study entry level of perceived family cohesiveness as reported on the FES (Woodall & Matthews, 1993).

Although these data on the development of hostile attitudes, interview behaviors, and mode of anger expression are consistent, they are less than conclusive because they are based on self-reported perceptions of family climate, and they typically

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Measurement of Family Interactions at Initial Assessment

Family members were asked to discuss and to attempt to resolve disagreements while being videotaped. Their verbal and nonverbal behaviors were subsequently coded according to the third edition of the Marital Interaction Coding System (MICS-III) by raters at the Oregon Marital Studies Program supervised by R. Weiss, one of the developers of the MICS. Twenty percent of the taped interactions were coded by two independent raters; the average point-by-point agreement rate between these two coders was 84.2%, which was calculated as (agreements - disagreements)/agreements.

The MICS-III contains 32 distinct codes that are grouped into Negative, Positive, and Neutral Behavior clusters on the basis of code frequencies, factor analyses, and the code clusters found by Weiss and colleagues (Weiss & Summers, 1983). The Negative Behavior category included the following codes: turn-off, put-down, criticize, complain, mind-read negative, deny responsibility, and disagree. Examples of negative statements are "You spend too much money on stupid things" and "You disgust me." The total number of negative behaviors was tallied for each 10-min discussion period for each participant. The Positive Behavior category included the following codes: approve, agree, humorous statement, mind-read positive, accept responsibility, paraphrase-reflect, positive and negative solution. Examples of positive statements are "I agree with that" and "I see what you mean, I'll try to change." The Neutral Behavior codes are applied to descriptions of the problems. Although the study hypotheses required analysis only of Negative Behaviors, we also explored the effects of low frequencies of Positive Behaviors on the boys' hostility scores. Note that the Negative Behavior category contains more homogenous codes than does the Positive Behavior category. Neutral Behavior rates are not reported.

After each discussion period, participants rated on a set of 4-point scales (from 1, *not at all*, to 4, *very much*) their perceptions of the extent of conflict resolution, their satisfaction with the discussion, and their own and others' feelings during the interaction, including feelings of being happy, frustrated, annoyed, and calm. After reverse scoring the ratings of calm and happy, we called negative affect the sum of frustrated, annoyed, calm, and happy feelings; resolution was the sum of feelings of satisfaction and resolution. Alpha coefficients ranged from .80 to .87 for negative affect and from .75 to .90 for resolution, depending on the family member.

Other Relevant Measures

At the follow-up evaluation, boys completed the Perceived Parenting Questionnaire (PPQ; MacDonald, 1971), the FES Cohesiveness subscale, and the Perceived Social Support Friends Scale (PSS-Fr; Procidano & Heller, 1983). The 21-item revised PPQ asks participants to respond to descriptions of parental behavior based on the "major portion" of their childhood, rather than merely current behavior. Statements of parental behavior, such as "My father punished me by not allowing me to be with my friends," are rated on a 5-point scale ranging from *never* to *almost always*. Scores on nine indices yielded from the PPQ were combined for each parent into two summary scores on the basis of a principal-components factor analysis of the indices: Nurturance-Consistency (Factor 1), the sum of nurturance, instrumental companionship, principled discipline, and predictability of standards, and Punitiveness (Factor 2), the sum of physical and affective punishment, protectiveness, achievement pressure, and deprivation of privileges. MacDonald (1971) reported internal consistencies ranging from .48 (principled discipline) to .81 (nurturance) for items referring to paternal behavior and from .50 (predictability of standards) to .82 (principled discipline) for maternal behavior; in the present sample, internal consistencies were .95 and .97, respectively, for the items constituting Factors 1 and 2.

The FES Cohesiveness subscale contains nine true-false statements about the degree of commitment, help, and support family members provide for one another. It has good reliability and has been validated against other measures of family supportiveness (Moos & Moos, 1981). This scale had also been completed at the study entry.

The PSS-Fr assesses perceptions of the quality of social support respondents receive from friends. Statements such as "My friends give me the moral support I need" were answered on a 4-point scale ranging from *strongly disagree* to *strongly agree* rather than with the original response options of *yes*, *no*, and *don't know*. The original version of the PSS-Fr demonstrates internal consistency with an alpha of .88 and is related to negative mood, anxiety, psychological distress, and social competency (Procidano & Heller, 1983). In the present sample, the alpha coefficient was .88 for the 4-point scale version.

Procedure

The initial assessment comprised two separate sessions, each beginning with the completion of consent forms and a review of the purpose and procedures of the study. In the first session, participants were tested individually to determine blood pressure and heart rate reactivity to three challenging tasks, following which they completed the Type A SI and other questionnaires, including the Areas of Change Questionnaire (ACQ; Weiss, 1980) for each other participating family member. The ACQ asks for the degree and direction of change desired in another family member for over 30 specific behaviors. The experimenter then interviewed the participant about his or her ACQ responses to determine the major conflict issues for discussion at the second session. Starting with those topics that were rated as requiring the most change, the experimenter asked for examples of desired change, whether the topic was still unresolved, and if the participant would be willing to talk about it directly with the other family member at the next session. Those issues that best met these criteria were selected for later discussion.

All three family members were tested together at the second session, which was scheduled as close in time to the initial assessment as possible. In a psychophysiology laboratory, participants faced each other while seated in comfortable chairs, with heart rate electrodes and blood pressure cuffs attached. Discussions were unobtrusively video-recorded for later MICS-III coding. After a warm-up discussion to acclimate participants to the procedures and setting, the three family members were asked to discuss and resolve "as best they could" for 10 min an area of conflict identified in the previous session from the ACQ. The experimenter told the participants to start and stop talking when they heard a buzzer, which allowed for a standard length of time for each discussion, and then left the room. Then a series of dyadic discussions were held for 10 min each, during which the nonparticipating family member left the room to complete questionnaires. Spouses, mother and son, and father and son in fixed order were presented the previously selected topics regarding ACQ item responses. Topics were somewhat similar across families, with triads discussing household chores (84%); mother-son dyads discussing communication problems (35%), general responsibility (18%), problems related to siblings and friends (10%), and arguing (10%); and father-son dyads discussing communication problems (43%), spending time together (35%), and school performance (8%). Following each discussion, participants were asked to complete the postdiscussion questionnaire. At the conclusion of the protocol, family members were thanked, debriefed, and paid an honorarium for their participation.

At the follow-up testing, parents were asked for consent to contact their children for follow-up testing and they completed several questionnaires. With parents' and sons' permission, sons were administered the Type A SI, the Cook-Medley Ho scale, the Anger Expression Scale, the PPQ, the FES Cohesiveness subscale, and the

PSS-Fr, usually in the free period during their school day. No honorarium was offered for participation in the follow-up study.

Results

Comparisons of the Characteristics of Participants and Nonparticipants

Even though the nonparticipants in the follow-up study were few in number, the first step in our analysis was to examine if nonparticipants had distinctive characteristics at the initial assessment that should be considered in interpreting the results of the longitudinal analyses. Participating boys ($n = 49$) and mothers ($n = 48$) had scores on all measures similar to those of their nonparticipating counterparts ($ns = 2$ and 3, respectively). Relative to nonparticipants ($n = 5$), participating fathers ($n = 46$) exhibited more negative behavior within the marital dyad ($M_s = 12.7$ vs. 4.4), $t(15.55) = 4.46, p < .001$, but similar levels of negative behavior within the other dyads and the triad. Participating and nonparticipating fathers had similar scores on the other psychosocial measures. Thus, it appears that the participating fathers were similar to nonparticipating fathers in all respects except in the level of marital conflict.

Interrelationships of Measures of Sons' Hostility

The correlations among the measures at study entry showed that boys who had mistrustful attitudes also reported expressing their anger outwardly, $r(49) = .42, p < .01$. Potential for Hostility ratings were unrelated to either Ho scale or Anger Expression Scale scores (r_s ranged from -.10 to .15, $ps > .30$).

Table 1 shows the mean scores for the sons' hostility measures at baseline and follow-up assessment 3 years later. Paired t tests showed that sons reported similar levels of mistrustful attitudes and of expressing anger outwardly on the Ho scale and the Anger Expression Scale, respectively, at the two assessments. In contrast, boys were rated higher on Potential for Hostility at the second assessment, relative to the first.

For all measures, Time 1 scores were inversely correlated with change in hostility from Time 1 to Time 2 (r_s ranged from -.45 to -.60). To develop Time 2 hostility scores for sons that were independent of Time 1 scores, we calculated standardized residual scores (regressing Time 2 onto Time 1 scores and standardizing scores). Residualized scores for Potential for Hostility and Anger-Out were highly related, $r(40) = .50, p < .001$, whereas Ho scale scores were unrelated to the other residualized scores (r_s ranged from -.10 to .23), which reaffirms the importance of the distinctions among mistrustful

attitudes, overt anger expression, and hostile interview behaviors.

Behavior During Family Discussions as Predictors of Sons' Hostility 3 Years Later

We examined the rates of negative and positive behaviors and the perceptions of the interactions (negative affect and resolution of conflict) for each family member. Means and standard deviations are reported in Table 2. Sons displayed more negative and positive behaviors during the mother-son dyad than during the father-son dyad, $t_s(50) > 3.17, p < .003$. Sons also reported feeling less negative affect and having more conflict resolution in the father-son dyad than in the triad, $t_s(50) = 3.59, ps < .001$.

Mothers displayed more negative behaviors and fewer positive behaviors during the mother-son interaction than during the triad, $t_s(50) > 2.72, p < .009$, but perceived similar levels of negative affect and conflict resolution during the triadic and mother-son interactions. Fathers displayed similar numbers of negative behaviors during the triadic and father-son discussions. Fathers displayed more positive behavior, $t(50) = 4.4, p < .001$, reported feeling less negative affect, and reported having more conflict resolution during the father-son discussion than during the triadic discussion, $t_s(50) = 2.23, ps < .03$. In sum, it appears that mothers and sons had more conflictual interactions than did fathers and sons.

We expected that the greater the number of negative behaviors during the family discussions and the more negative the participants perceived the interaction to be (high negative emotion, low resolution of conflict) at the initial assessment, the more hostile the boys would be 3 years later after we adjusted for initial hostility levels. We also explored the effect of low frequency of positive behaviors during the family discussions on boys' subsequent hostility levels. Results of correlational analyses relevant to these hypotheses are presented in Tables 3 and 4.

Overt negative and positive behaviors. Table 3 shows that high rates of negative behavior exhibited by sons and their fathers and mothers during the triadic discussion and by sons and their mothers during the mother-son interaction predicted sons' hostile attitudes as measured by the Cook-Medley Ho scale 3 years later (see first column). High levels of negative behavior exhibited by the son during the triad and by mothers and sons during the mother-son dyad predicted expressing anger outwardly as measured by the Spielberger Anger-Out scale 3 years later (see third column). Ratings of sons' Potential for Hostility were unrelated to overt negative behaviors (see fifth column) but were related to low rates of positive

Table 1
Sons' Means and Standard Deviations of Hostility Scores at Baseline and Follow-up

Hostility measure	Baseline		Follow-up		<i>t</i> test		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>p</i>
Cook-Medley Hostility scale	71.2	14.9	72.6	12.4	-0.93	44	.36
Spielberger Anger-Out subscale	17.9	4.9	17.2	4.1	1.02	46	.31
Potential for Hostility rating	1.7	0.65	2.8	0.82	-7.97	40	.00

Table 2
Mean Number of Negative and Positive Behaviors and Perceptions of Negative Affect and Conflict Resolution During Family Discussions

Variable	Father		Mother		Son	
	M	SD	M	SD	M	SD
Negative behavior						
Triad	11.0	7.9*	11.8	7.9*	10.9	8.2*
Mother-son dyad			15.8	12.2*	15.4	11.6*
Father-son dyad	11.6	8.5			10.0	6.9
Positive behavior						
Triad	11.0	5.8	11.3	6.2*	10.4	4.9
Mother-son dyad			8.0	5.9*	18.4	8.2
Father-son dyad	18.8	11.0			10.3	7.3
Negative affect						
Triad	8.0	2.6	7.8	2.2	8.6	3.2
Mother-son dyad			7.6	2.7	7.7	2.9
Father-son dyad	6.9	2.0			7.1	2.5*
Conflict resolution						
Triad	5.0*	1.6	5.1	1.4	5.2	1.5
Mother-son dyad			5.4	1.7	5.7	1.7
Father-son dyad	5.6	1.3			6.2	1.5

*These distributions were skewed and subjected to rank order correlational analysis in all subsequent correlational analyses.

behaviors during the triadic discussion (see sixth column). Note that none of the negative or positive behavior ratings from the father-son dyad correlated with sons' subsequent hostility.

To evaluate whether these significant correlations were due to boys who increased in levels of hostility during the 3 years, boys who decreased in levels of hostility, or both, we conducted an additional analysis correlating the relevant behavior codes with the change in hostility scores from Time 1 to Time 2. These analyses showed a pattern of results similar to those obtained for the residualized scores for the Ho scale and the Potential for Hostility ratings. The extent of the boys' change in Ho scale scores over time was associated with the extent that they and their parents exhibited negative behavior during the triad and the mother-son dyad, $rs > .27$, $ps < .07$. The extent

of the boys' change in Potential for Hostility ratings over time was associated with the extent that they and their fathers exhibited low rates of positive behavior during the triad, $rs = -.44$ and $-.42$, $ps < .004$, and that their mothers exhibited low rates of positive behavior during the triad, $r = -.25$, $p = .11$.

The correlations between the rate of negative behaviors during the triad and the mother-son dyad and the change in Spielberger Anger-Out scores were nonsignificant, although the corresponding correlations with residualized scores were significant. This is because of the simultaneous inverse correlation of Time 1 Anger-Out scores with change from Time 1 to Time 2 in Anger-Out scores, and the positive correlations between boys' Anger-Out scores at Time 1 and boys' negative behavior during the triad and the mother-son dyad, $rs > .26$, $ps < .03$, and mothers' negative behavior during the mother-son dyad, $r = .41$, $p = .001$.

If we take these findings together with the results of the correlational analyses, it appears that high rates of negative, nonsupportive parent-son interactions were related to boys' increases in hostile attitudes 3 years later, whereas low rates of positive, supportive parent-son interactions were related to boys' increase in ratings of Potential for Hostility. High rates of negative parental behavior predicted follow-up scores on the Spielberger Anger-Out scale, adjusted for initial levels, although it did not predict the magnitude of change in Anger-Out scores.

Perceived negative affect and conflict resolution. As shown in Table 4, mothers and fathers who perceived less resolution of conflict and fathers who reported feeling more negative affect during the triadic discussion had boys who subsequently reported more hostile attitudes. Surprisingly, the sons who felt less negative affect during the father-son interaction had more hostile attitudes 3 years later. Boys who increased in Potential for Hostility across the follow-up period reported experiencing more negative affect during the triadic discussion and tended to report more negative affect during the mother-son and father-son dyadic discussions. Fathers who perceived their discussions with their sons as less resolved were more likely to

Table 3
Correlations Between Negative and Positive Behavior During Family Discussions and Sons' Hostility Scores 3 Years Later, Adjusted for Initial Hostility Scores

Discussion and family member	Cook-Medley Hostility scale		Spielberger Anger-Out subscale		Potential for Hostility rating	
	Negative	Positive	Negative	Positive	Negative	Positive
Triad						
Father	.36**	.20	.25*	-.12	.06	-.34**
Mother	.48***	.09	.23	-.05	.02	-.30*
Son	.47***	.12	.36**	-.01	.15	-.36**
Mother-son dyad						
Mother	.32**	.03	.34**	.17	.15	-.08
Son	.36**	-.05	.40***	-.14	.11	-.08
Father-son dyad						
Father	.22	.03	.01	.12	-.09	.02
Son	.11	.10	.01	-.05	-.09	-.13

* $p < .10$. ** $p < .05$. *** $p < .01$.

Table 4
Correlations Between Perception of Negative Affect and Conflict Resolution During Family Discussions and Sons' Hostility Scores 3 Years Later, Adjusted for Initial Hostility Scores

Discussion and family member	Negative affect			Conflict resolution		
	Cook-Medley Hostility scale	Spielberger Anger-Out subscale	Potential for Hostility rating	Cook-Medley Hostility scale	Spielberger Anger-Out subscale	Potential for Hostility rating
Triad						
Father	.32**	-.03	.07	-.31**	.06	-.20
Mother	.14	.11	-.02	-.33**	.07	-.18
Son	.00	-.08	.33**	-.04	.05	-.26*
Mother-son dyad						
Mother	.13	.18	.20	-.08	-.03	-.01
Son	.06	.12	.28*	-.15	-.08	-.09
Father-son dyad						
Father	-.14	.01	.21	.05	-.32**	-.47***
Son	-.32**	-.06	.28*	.21	.11	-.25

* $p < .10$. ** $p < .05$. *** $p < .01$.

have sons who subsequently reported expressing their anger outwardly and were rated as high in Potential for Hostility.

Concurrent Associations Among Boys' Hostility Measures, Perceived Parenting Styles, and Parental Ratings of Current Conflict at Follow-Up

Given that we hypothesized that perceptions of negative parent-son interactions would influence the development of subsequent hostility, we also anticipated that hostile boys would concurrently report more punitive, less nurturant, or less consistent parenting styles than would nonhostile boys. We also tested the relationship between hostility and nonsupport from friends because we wanted to see if conflictual nonsupportive parental behavior extended to the nonfamily context. These correlations are presented in Table 5.

Boys who had high Ho scores had low perceived support from friends; they perceived their fathers and mothers to be punitive in their parenting styles and their mothers to be low in nurturance and consistency of standards. Boys who expressed their anger outwardly had fathers whom the boys perceived as nurturant and consistent in standard setting; these boys perceived their families as cohesive and tended to perceive their friends as supportive. Boys given high ratings for Potential for Hostility tended to perceive their mothers to be punitive in their parenting style.

Discussion

Our major objective in the study was to evaluate the effects of negative parent-son interactions on the subsequent level of adolescent boys' hostility. The results showed that, by and large, parent-son interactions characterized by high levels of negative behaviors predicted subsequent high levels of mistrustful attitudes and of expressing anger outwardly. Furthermore, sons who experienced low rates of positive behaviors during the triadic discussion and who reported high levels of negative emotion and low conflict resolution received subsequently high ratings on Potential for Hostility. To our knowledge, these data

are the first to demonstrate prospectively that observed nonsupportive, affectively negative family interactions lead to relatively high levels of hostility in boys.

Although the above pattern generally holds true, it is noteworthy that the negative behavior exhibited in the father-son dyad did not predict sons' hostility, whereas the negative behavior exhibited in the mother-son dyad did. It appears that the mother plays a unique role in determining subsequent levels of hostile attitudes and style of anger expression in boys of middle-school age. Perhaps this is a consequence of the fact that mothers and sons in our study had more heated discussions and apparently experienced a higher rate of disagreements in general than did fathers and sons. Indeed, other investigators have also reported higher rates of disagreement

Table 5
Correlations Between Concurrent Measures of Sons' Hostility and Measures of Perceived Parenting Styles, Family Environment, and Friends' Support

Measure	Cook-Medley Hostility scale	Spielberger Anger-Out subscale	Potential for Hostility rating
PSS-Fr	-.29**	.25*	-.09
FES Cohesiveness scale	-.19	.34**	-.05
PPQ, fathers			
Nurturance-Consistency of Standards	-.11	.39***	.10
Punitiveness	.34**	.16	.00
PPQ, mothers			
Nurturance-Consistency of Standards	-.33**	.13	-.25
Punitiveness	.44***	.17	.28*

Note. PSS-Fr = Perceived Social Support Friends Scale; FES = Family Environment Scale; PPQ = Perceived Parenting Questionnaire.

* $p < .10$. ** $p < .05$. *** $p < .01$.

between mothers and sons than between fathers and sons (Laursen, 1995; cf. Jacob, 1974).

It may also have to do with the nature of disagreements between mothers and sons versus those between fathers and sons. Although the most common topic of discussion in both of these dyads was communication difficulties, our subjective impression was that the content of discussions was quite different. This impression is consistent with item analyses of the ACQ that were used to identify the topics for discussion in the interactions. Relative to changes that they wanted from their mothers, sons wanted their fathers to pay more attention to them, do things with them, understand what they feel, and give them money, $p < .05$, and they tended to want their fathers to spend time around the house, spend time with them, and to communicate likeable things about them, $p < .09$. In contrast to changes that they wanted from their fathers, the boys wanted their mothers to leave them alone, let them dress their own way, and let them stay out late, $p < .05$, and they tended to want their mothers to let them make their own decisions, $p < .06$. These findings suggest that perhaps the negative behavior during the mother-son dyad may have more to do with thwarted attempts by the son to withdraw or with the mother's interfering, whereas the negative behavior during the father-son dyad may have more to do with thwarted attempts by the son to approach.

Although it was not the primary objective of the study, we also examined the concurrent relationship of adolescent boys' perceptions of their parents' child-rearing styles on a standardized instrument and the boys' hostility scores. These findings were largely consistent with the longitudinal results of the observed negative behaviors during the interactions. Boys who had mistrustful attitudes toward others reported that their fathers and mothers were punitive in their style and that their mothers were not nurturant or consistent in their parenting. These findings are similar to previous reports of parental child-rearing practices perceived by college students with high versus low mistrustful attitudes (Houston & Vavak, 1991; Smith et al., 1988).

We also examined if hostile adolescent boys perceived nonfamily aspects of their environment as nonsupportive, that is, if they perceived friends as nonsupportive. Again, it appears that boys with hostile attitudes do perceive their friends as nonsupportive. These findings are of particular interest given suggestions that hostile individuals might be vulnerable to poor health because they have fewer and less satisfying relationships (Smith & Frohm, 1985; Smith et al., 1988). Our findings suggest that mistrustful attitudes might prevent the development of or access to satisfying relationships early in life. In the present context, then, one could propose that negative parent-child interactions lead to children's mistrusting others, which, in turn, leads to hostile behaviors that result in peer rejection, isolation, and still more hostility (see Dishion, Patterson, & Griesler, 1994, for a similar analysis applied to aggressive behavior).

It is worthwhile discussing why the above patterns of results varied according to the measurement tool used. Perhaps in part this variability is due to differences in reliability of measurement. In another sample (Woodall & Matthews, 1993) as well as the present sample, Potential for Hostility ratings

were less consistent over 3-4 years in boys than were scores for an MMPI-derived Hostile Attitudes scale, which was highly correlated with Ho scale scores. The lower reliability of the Potential for Hostility ratings could suggest true age-related changes in hostile interview behavior or that specific overt behaviors displayed by boys during the Type A SI may be responsive to specific environmental factors, such as interviewer style, daily stress, and so forth (Woodall & Matthews, 1993).

Perhaps in part this variability is due to the differences in the conceptual meaning tapped by the measures. The Cook-Medley Ho scale assesses mistrustful attitudes, whereas the Spielberger Anger-Out scale measures a tendency to express anger outwardly. Mistrustful attitudes appear to be strongly affected by negative family dynamics, even in the middle-school years, and are associated with perceptions of parents being punitive, mothers being low on nurturance and clarity of standards, and the family environment and friends being nonsupportive. Although the tendency to express anger outwardly was related to negative family interactions, both immediately as well as 3 years later, the long-term effect on mental or physical well-being is open to debate. The tendency to express anger outwardly could stem either from an inability to solve interpersonal problems, which results in an open expression of frustration and anger, or from the confidence that one's angry feelings will be accepted if kept under control. The latter is less likely an explanation given our correlations between observed negative behavior and Anger-Out levels but is consistent with at least some of the findings: Boys who scored highly on the Spielberger Anger-Out scale also perceived their families as cohesive and their fathers as being nurturant and providing consistent standards. Potential for Hostility ratings in adolescence especially tend to weigh heavily frequency and intensity of uncooperativeness and sullenness, as opposed to overt anger or rudeness. The boys who increased substantially in hostile interview behaviors were those who experienced low rates of positive interactions and who reported low levels of positive affect and high levels of negative affect. Perhaps, then, increases in sullenness or uncooperativeness are more related to the absence of positive reinforcement and the awareness and interpretation of negative emotion than they are to the occurrence of overtly negative family interactions.

Although these findings provide general support for the study hypotheses, that is, that negative, nonsupportive family interactions predict future hostility levels of sons, these results may have been obtained because the negative, nonsupportive interactions (a) are consistent over time, which results in concurrent interactions being related to concurrent hostility; (b) lead to further increases in the frequency of negative, nonsupportive family interactions, which result in an adverse change in family dynamics being related to a change in hostility; or (c) occur at a critical developmental period, after which the rates of negativity change. Because the study design did not include parenting questionnaires at study entry and the observational protocol was not repeated at follow-up, we cannot choose among these possibilities. Nonetheless, the first explanation is unlikely for the Ho scale and the Anger-Out scale, because those scales are highly reliable across the 3 years in the present sample and our analysis controlled for initial

hostility level. Also, recall in our previous study that children's follow-up Potential for Hostility ratings and Ho scores, after being adjusted for initial scores, were predicted by a decrease from study entry level of perceived family cohesiveness reported on the FES (Woodall & Matthews, 1993). A similar observation is also true in the present sample: Increases in perceived family cohesiveness were related to declines in mistrustful attitudes over time, $r(42) = -.31$, $p < .04$, which suggests that a change in family dynamics may have had an observable effect.

Several limitations of our study should be noted here. The sample consisted of predominantly Caucasian middle-class and upper-middle-class adolescent boys. The findings may not generalize to other samples, including girls. We cannot separate the effects of the sons' versus the parents' negative behavior during the interactions on sons' subsequent hostility. That is, not only were parents' negative behaviors predictive of sons' future hostile attitudes and outward anger expression, but sons' negative behaviors in the same interactions were also predictive. In consequence, we do not know from our analysis if parents' or sons' negative behavior was more critical to the development of sons' hostility or if the negative behaviors of both parents and sons were critical. We are concurrently conducting analyses of the sequences of negative behaviors within the interactions to examine the reciprocity of negative behavior between parents and children. Nonetheless, our findings do suggest that markers of a poor family climate, that is, high levels of negative behaviors by mothers, fathers, and sons in the triad and by mothers and sons in the dyad, are an important predictor of sons' hostile traits.

In general, our findings support the notion that hostility, especially hostile attitudes and style of anger expression, are developed early in life, in part as a consequence of negative parent-son interactions. Boys' mistrustful attitudes extend to viewing both of their parents as punitive and their mothers as nonnurturant and inconsistent. Boys who are hostile may also experience their nonfamily environment as nonsupportive in consequence because they have not learned to trust or to access the positive aspects of their social environment. Thus, the development of hostility early in life may preclude a healthy lifestyle, both mentally and physically.

References

Berenson, G. S. (1980). *Cardiovascular risk factors in children*. New York: Oxford University Press.

Cook, W. W., & Medley, D. M. (1954). Proposed hostility and pharisaic-virtue scores for the MMPI. *Journal of Applied Psychology*, 38, 414-418.

Dembroski, T. M., & Costa, P. T., Jr. (1987). Coronary-prone behavior: Components of the Type A pattern and hostility. *Journal of Personality*, 55, 211-235.

Dembroski, T. M., MacDougall, J. M., Costa, P. T., & Grandits, G. A. (1989). Components of hostility as predictors of sudden death and myocardial infarction in the Multiple Risk Factor Intervention Trial. *Psychosomatic Medicine*, 51, 514-522.

Dembroski, T. M., MacDougall, J. M., Williams, R. B., Haney, T. L., & Blumenthal, J. (1985). Components of Type A, hostility, and anger-in: Relationship to angiographic findings. *Psychosomatic Medicine*, 47, 219-233.

Diamond, E. L. (1982). The role of anger and hostility in essential hypertension and coronary heart disease. *Psychological Bulletin*, 92, 410-433.

Dishion, T. J., Patterson, G. R., & Griesler, P. C. (1994). Peer adaptations in the development of antisocial behavior: A confluence model. In L. R. Huesmann (Ed.), *Aggressive behavior: Current perspectives* (pp. 61-95). New York: Plenum.

Hecker, M. H. L., Chesney, M. A., Black, G. W., & Frautschi, N. (1988). Coronary-prone behaviors in the Western Collaborative Group Study. *Psychosomatic Medicine*, 50, 153-164.

Houston, B. K., & Vavak, C. R. (1991). Cynical hostility: Developmental factors, psychological correlates, and health behaviors. *Health Psychology*, 10, 9-17.

Jacob, T. (1974). Patterns of family conflict and dominance as a function of child age and social class. *Developmental Psychology*, 10, 1-12.

Laursen, B. (1995). Conflict and social interaction in adolescent relationships. *Journal of Research on Adolescence*, 5, 55-70.

Laursen, B., & Collins, W. A. (1994). Interpersonal conflict during adolescence. *Psychological Bulletin*, 115, 197-209.

MacDonald, A. P. (1971). Internal-external locus of control: Parental antecedents. *Journal of Clinical and Consulting Psychology*, 37, 141-147.

Matthews, K. A., Glass, D. C., Rosenman, R. H., & Bortner, R. W. (1977). Competitive drive, Pattern A, and coronary heart disease: A further analysis of some data from the Western Collaborative Group Study. *Journal of Chronic Diseases*, 30, 489-498.

Matthews, K. A., Woodall, K. L., Engebretson, T. O., McCann, B. S., Stoney, C. M., Manuck, S. B., & Saab, P. G. (1992). Influence of age, sex, and family on Type A and hostile attitudes and behaviors. *Health Psychology*, 11, 317-323.

Moos, R., & Moos, B. (1981). *Family Environment Scale manual*. Palo Alto, CA: Consulting Psychologists Press.

Petersen, A. C., Crockett, L., Richards, M., & Boxer, A. (1988). A self-report measure of pubertal status: Reliability, validity, and initial norms. *Journal of Youth and Adolescence*, 17, 117-133.

Prociano, M. E., & Heller, K. (1983). Measures of perceived social support from friends and from family. *American Journal of Community Psychology*, 11, 1-24.

Siegel, J. M., & Leitch, C. J. (1981). Assessment of the Type A behavior pattern in adolescents. *Psychosomatic Medicine*, 43, 45-56.

Smith, T. W. (1992). Hostility and health: Current status of a psychosomatic hypothesis. *Health Psychology*, 11, 139-150.

Smith, T. W., & Frohm, K. D. (1985). What's so unhealthy about hostility? Construct validity and psychosocial correlates of the Cook and Medley Ho scale. *Health Psychology*, 4, 503-520.

Smith, T. W., Pope, M. K., Sanders, J. D., Allred, K. D., & O'Keefe, J. L. (1988). Cynical hostility at home and work: Psychosocial vulnerability across domains. *Journal of Research in Personality*, 22, 525-548.

Spielberger, C. D., Johnson, E. H., Russell, S. F., Crane, R. J., Jacobs, B. A., & Worden, T. J. (1985). The experience of anger. In M. A. Chesney, S. E. Goldston, & R. H. Rosenman (Eds.), *Anger and hostility in behavioral medicine* (pp. 5-30). New York: McGraw-Hill.

Weiss, R. L. (1980). *The Areas of Change Questionnaire*. Eugene, OR: University of Oregon Marital Studies Program.

Weiss, R. L., & Summers, K. J. (1983). Marital interaction coding system—III. In E. Filsinger (Ed.), *Marriage and family assessment* (pp. 85-115). Beverly Hills, CA: Sage.

Woodall, K. L., & Matthews, K. A. (1989). Familial environment associated with Type A behaviors and psychophysiological responses to stress in children. *Health Psychology*, 8, 403-426.

Woodall, K. L., & Matthews, K. A. (1993). Changes in and stability of hostile characteristics: Results from a 4-year longitudinal study of children. *Journal of Personality and Social Psychology*, 64, 491-499.

psychotherapists is megalomaniac. We hold that it is probably conservative. Therefore, all social revolutions have been hit-or-miss propositions in regard to whether the projected political or economic systems would be psychically beneficial to the individual man. The world is becoming too crowded and technologically too advanced to be run by men who do not comprehend the relationships between social forces and psychodynamic mechanisms. We believe that the psychotherapist of the not too distant future, in his radically changed image as a psychiatric sociologist, will have just as great a role to play as a political scientist, as he will have as a diagnostician and medical therapist.

STANLEY LESSE, M.D.

Masked Depression in Children and Adolescents*

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Depression in the adult is a well-known psychiatric condition with rather well-defined and relatively easily recognizable symptoms. In the child and adolescent, depression is often not recognized as such because it may be hidden by symptoms not readily identified with this condition. Textbooks of psychiatry and even child psychiatry give little space to the subject of depression per se, yet, when searching in different chapters, one is struck by the frequency with which signs pointing toward the existence of depression are found in cases classified under a variety of diagnoses and chapters other than depression.

Symptoms which in the adult indicate depression are not necessarily found in children with depressive reaction. Keeler (1) writes, "Depressive reactions are not commonly met within children" and in a later paragraph on the same page, "Depression in children is difficult to detect. Many of the features seen in adults, e.g. disturbances in eating and sleeping habits, psychomotor retardation, etc. are frequently absent." Toolan (2) states, "One of the reasons that suicidal attempts have been overlooked in children and adolescents is the erroneous concept that youngsters do not experience depression. It is true that they do not exhibit the signs and symptoms of adult depressive reactions but rather other symptoms." Thus, symptoms which in the adult are usually considered diagnostic for depression—such as suicidal attempts or suicide—do not necessarily point toward the same diagnosis in children, but may be impulsive acts, indicating acute anger or rebellion (3, 4, 5) rather than chronic depression. Sleep difficulties may "resemble in manifest appearance the sleeping disorders of depressive or melancholic adults" but usually are neither the symptoms nor forerunners of depression in children (6).

The cases discussed in this paper, some taken from the literature and

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others from the author's own experience, should meet two criteria. The presenting symptoms should not usually be associated with depression, yet there should be sufficient evidence that the patient's psychopathology features depressive elements. For the purpose of this presentation, depression or depressive features are understood to exist when the patient expresses feelings of inadequacy, worthlessness, low self-esteem, helplessness and hopelessness, rejection by others, isolation; yet in the eyes of the examiner or the patient's immediate environment these feelings do not correspond to the patient's actual life situation or are stronger than the patient's actual condition seems to warrant. Depression may be, but does not necessarily have to be, the underlying causative pathology or even the main psychopathologic reaction, but it must be a definite feature of the total picture of the child's disturbance.

The recognition of depressive features in the child's psychiatric make-up is important for the appropriate psychotherapeutic approach. Not only may the masking symptoms misdirect the therapist, parents, teachers, or institutional personnel in their endeavor to help the patient and instead lead them to institute damaging measures, but the depressive elements in the patient's thought process are apt to reduce further his capacity to function. Obviously, special consideration must be given to those individuals who, due to their intellectual limitations, are not able to compete with people in their immediate environment and actually are rejected by them. This will be taken up in the discussion on masked depression in the mentally retarded. Manifest behavior disturbances revealing underlying depressive reactions in children of different age levels are described below.

Infants and Small Children

Deprivation reactions in infants and small children present themselves as developmental retardation and often affect the physical, intellectual, and emotional development of the child. Depressive elements can be operative in addition to developmental retardation. Spitz (7) first coined the term "anacritic depression" in small children deprived of their mother's presence. He described the sequence of their reaction to separation from the mother in three phases. At first the child shows active protest and a violent emotional reaction in an apparent attempt to bring mother back. This is followed by active rejection of adults and finally by apathy, withdrawal of interest in people, and a decreased activity level.

Failure to thrive is today a well-known pediatric syndrome found in children who have suffered deprivation of stimulation and affect. Growth failure in maternal deprivation has recently been described in a book by Patton and Gardner (8). Intellectual retardation as a result of understimu-

lation has been widely published and researched in the past and has come recently to the foreground in an attempt at its prevention in the impoverished section of our population. Damage to personality development as a result of prolonged absence of a meaningful one-to-one relationship to a mother figure has been pointed out by the well-known publications of Goldfarb (9), Bowlby (10), and others. A review of the subject of maternal deprivation, including pertinent literature, was published in *Pediatrics* in 1956 (11).

The existence of depressive elements in these deprived children is often not recognized, and too little attention may be given to a corrective psychiatric approach to this condition.

Older Children and Adolescents

In older children *behavioral problems and delinquent behavior*, such as temper tantrums, disobedience, truancy, running away from home, may indicate depressive feelings but may not be recognized as such (2). Keeler (1) stated that delinquent behavior was present in 7 of 11 patients studied at the Psychiatric Division of Bellevue Hospital for their reaction to the death of a parent. *Psychoneurotic reactions*, such as school phobia, can mask underlying depression (12), and *failure to achieve in school* can be a symptom of unrecognized depression (13, 14). A *psychophysiological reaction* may at times be the presenting symptom in children with depressive feelings (1).

Delinquency. Aichhorn in his book on delinquency (15) describes a seventeen-year-old shoemaker's apprentice who suddenly ran away from his job and did not return home for days. He became defiant. The boy's behavior was such that it disrupted the entire life of the family consisting of father, stepmother, five-year-old half-sister and nineteen-year-old brother who was about to enter University. The father, in desperation, wanted to send the boy to the institution for delinquents. In the interview the boy voiced a hopeless outlook on life ("It's no use"). He now revealed that at the time of his first disappearance from home he wanted to kill himself rather than run away with the idea never to return.

In another boy, sixteen years old, who was committed to Aichhorn's institution, the presenting symptoms were vagrancy and refusal to work. The symptoms appeared shortly after the shocking accidental death of the boy's mother, and Aichhorn states in the study of the case, "perhaps the boy escaped melancholia in this way."

Case 1. A twelve-year-old boy was brought to my attention because he drove and wrecked the family car while the parents were asleep. In school he had committed various mischievous acts leading to destruction of property, and he had stolen knives, among other things. He was one of three adopted boys, with one

natural sister, in an economically upper class family. He was able to verbalize a great deal of hostility against his parents for their rigid control and against his sister who, he felt, was favored. He was unusually tall for his age, and saw this as a source of difficulty since on the one hand he was expected to act older and on the other hand he had trouble with peers. His depression became evident at first by the content of an essay he had to write for the judge as a punishment for his unlawful driving. Later he verbalized about not liking himself and about his fears of death both during waking hours as well as in dreams. He had difficulties in going to sleep and often awoke in the middle of the night.

One may well speculate whether his driving attempts at night and his stealing and carrying knives may not have had suicidal or destructive motivation, or both. The depressive features of low self-esteem and dissatisfaction with himself were probably major contributing factors in this boy's delinquent behavior.

Case 2. An eighteen-year-old girl was referred because she was keeping undesirable company and late hours; also because of drinking, promiscuous behavior, and threats of running away. She had just graduated from high school and had been accepted at a local college. Her delinquent behavior had its onset during the summer. She was an only child whose father had died when she was seven years old. Three years later her mother married a man with three children. It became evident during the first interviews that this girl was in severe conflict over her great dependency upon her mother ("I was always spoiled rotten") and her desire to be independent. She felt the mother had remarried to provide a father for her, and she blamed herself for the mother's unhappy marriage. She described herself as isolated and depressed ("nobody likes me"). The previous summer she had tried to overcome this isolation by freely giving of herself sexually. "I need affection; I don't get it at home, I try to get it from other people. Last year I looked for pity and sympathy . . . this year I try to get close to boys—even if I know they don't like me—even if just while they are with me." To her mother she stated, "I know I am killing you slowly but surely."

It seems very likely that the depressed feelings of isolation, lack of love, and guilt led this girl to her acting-out behavior. In the course of the interviews she verbalized her desire to change her recent course of life; she dropped the idea of college (she had registered only to please her mother) and actively started to look for a job, recognizing her own lack of preparedness for any worthwhile occupation. She was restraining her behavior to correct her reputation while keeping the contact with male companions within socially acceptable limits.

These cases demonstrate delinquent behavior as the presenting symptoms, masking an underlying depression. The dynamics of the depressive reaction, different for each case, are beyond the scope of this paper.

School Phobia. Agras (12), studying seven cases of *school phobia* (three girls and four boys, aged six to twelve) found that six of the seven children

showed symptoms of depression, such as weeping for no apparent reason, and "unhappy, miserable, whining behavior." There was also a high incidence

of depressive reactions among the parents of these children (termed depressive constellation by Agras).

Case 3. Acute school phobia on the second day of school was the presenting symptom in a fourteen-year-old girl in the 9th grade. After attending the first day of school without apparent difficulties, her behavior became hysterical on the second day, and a change of schools (from public school to an exclusive private day school) did not change the situation. The girl was socially active, physically attractive, and had been an average student the previous year. Her suicidal thoughts, both during waking hours and in dreams, were revealed to the therapist during the first hours of treatment; she had thought of jumping off the porch, cutting her wrists, and taking sleeping pills. She then expressed overt and covert wishes for her mother's divorce or death.

In this case we see school phobia as the presenting symptom in a child with severe intrafamilial and intrapsychic conflicts, with depression very much in evidence underneath the masking symptomatology.

Learning Difficulties. School failure may be another symptom (or syndrome) masking underlying depression. Wertz (13), in evaluating psychodynamic stresses of the eight cases he reviewed, states "the self image of these patients was uniformly poor . . . They experienced themselves as weak and helpless with chronic feelings of inadequacy and inferiority. . . . There were identifications with the handicapped and the underdog."

Silverman *et al.* in their study on learning problems (14) present the case of eight-year-old Roy, referred for learning difficulties, aggressiveness, and hyperactivity. He was chronically fearful and preoccupied with illness and death, had experienced serious operations in both mother and father and the death of an older sister "who often fondly cared for him." Roy made statements such as: "I'd try and forget about mother and sister . . . but then I remember it in the classroom, like when I'm reading and feel sad and worried." His mother was unhappy, depressed, and unsure of herself.

In the second case report in the same paper, Jay, an eight-year-old boy, was referred because of disturbed classroom behavior and reading retardation in the presence of adequate intelligence. The school personnel described him as occasionally depressed and frequently complaining of somatic symptoms. During treatment the following observations indicated depressive features: he exaggeratedly rebuked himself, was tired and had difficulty sleepings; he was preoccupied with injury, illness, and death. It is interesting to note that his mother had a "deep sense of inadequacy" and "mood swings from excitement to depression."

Both cases, referred for learning difficulties (reading disability) presented

evidence of underlying depressive feelings and interestingly enough, both also showed the "depressive constellation" as described by Agras (12).

Case 4. A rapid downhill course from a good student in the 7th grade to failing marks in the 8th was the presenting symptom in a thirteen-year-old girl. She considered herself stupid, unable to keep up with her classmates, not liked by parents and siblings. The symptoms occurred at the time of her menarche, and she spent much of the interview time discussing the struggle of her changing identity from a child to an adolescent and future adult. She expressed her guilt for her mother's varicose veins, for which she felt responsible since they had occurred following her mother's pregnancies. She was overly concerned about illness and death and finally was able to express her guilt over her death wishes for members of her family. She admitted at least on one occasion to have looked for pills to kill herself.

The depression, camouflaged by school failure, was not evident to her immediate environment (teacher, school counselor, parents). Her parents, very intelligent professionals, considered her happy and popular and described the family relationship as good.

Case 5. School failure was the presenting problem in a very bright girl, ten and a half years old. She had had traumatic experiences in foster homes after her mother's divorce and was well aware of the current marital difficulties as well as her stepfather's immature behavior. He had had psychiatric care for depressions. Her attachment to her stepfather was pathologically intense, leading during later years to overt sexual approaches. Projective tests showed feelings of inadequacy and unfulfilled dependency needs as well as depression. She wanted to be a nurse "to help children in wards who had unhappy lives." When she was fifteen, she showed delinquent behavior in addition to continued academic difficulties. She now verbalized her feelings of being unwanted as demonstrated to her by the biologic father's desertion of the family and her subsequent foster home placement. The only person by whom she felt really loved was her stepfather, which created severe incestual conflicts. She considered herself the cause of the current marital difficulties and spoke of depression and suicide. Some of her delinquent behavior gave indication of her self-destructive drive.

In this case, depressive elements and suicidal tendencies were overshadowed by the presenting symptoms of school failure, delinquency, and prominent psychosexual conflicts.

One may include in this chapter on school failure a group of older adolescents and young adults who attend college, shift their major interest from field to field, thereby losing credits for previous studies, interrupt, re-start, go part time. This faltering in the studies, the indecisiveness of choosing a career may hide the underlying lack of self-confidence and often frank depression. It also serves as a device to keep the person in the sheltered position of a student, and to avoid the responsibility of commitment toward

a certain career, toward moving from the home of the parents or from the regulated dormitory set-up to face the realities of adult life.

Psychophysiologic reactions. Keeler (1) describes the case of a boy of six and a half with headaches, abdominal pains, and vomiting. He presented himself as a friendly, smiling, cooperative child, alert and playful. Extensive medical examination revealed no organic pathology. Only months later it became clear during psychiatric evaluation that the psychosomatic symptoms started shortly after he was told of his father's death, and projective tests made it quite "obvious that these surface manifestations obscured feelings of depression. . . ."

Case 6. This fifteen-year-old girl had been referred because of colitis for which she had in the past been hospitalized in critical condition. Her response to medical treatment was unsatisfactory. After an initial period of blaming her parents, her friends, and the physicians who attended her for her difficulties, she changed to [redacted] statements as: "I hate myself for thinking the way about people—blaming them. Why do I always feel inferior?" She then spoke about her inadequacies, her inability to live up to her mother's expectations, her own contribution toward her isolation from friends.

Case 7. Psychophysiologic reactions and school failure were the presenting problems of an eleven-year-old boy with an I.Q. of 125. He was an only child. He frequently missed school because of "spastic bowels" and headaches. There was considerable conflict between the parents, both in background and in personality, which was denied during the first months of treatment of the child. The mother was suffering from ulcerative colitis sufficiently severe to cause her hospitalization. The father was a health fanatic preoccupied with pills, diet, and exercise.

An earlier referral for psychiatric treatment when the child was seven, had never been followed through and was almost forgotten. The presenting symptoms then had been lonesomeness, unhappiness, crying spells. Only now, when the boy was eleven, did the parents really seek help because academic failure threatened promotion to the next grade.

After some interviews the child described himself as the second smallest in class (true) and ugly (he was very attractive looking and well built). He stated, "I can't do anything right—never please father—nobody likes me." It was not tutoring [redacted] change of class or school which was needed but rather psychiatric treatment [redacted] the child to alter his self-concept, and considerable work with the parents with regard to their approach to the child and their facing up to their marital difficulties.

This last group of cases illustrates psychophysiologic reactions in children with underlying depressive features which should not be ignored or overlooked during treatment.

So far we have presented examples of masked depressive elements in the psychopathology of youngsters who were brought to the attention of the

Depressive Reactions as Manifested Among Adolescent Delinquents*

Behavior disturbances and psychologic reactions in children and adolescents may conceal depressive elements in the underlying psychopathology. These depressive elements are not identical with the classic disease entity of depression or with the self-limited depressive episodes known in adult psychiatry. Nevertheless, they are dynamic forces influencing the child's functioning or malfunctioning, as the case may be.

In the very young child and in the mentally retarded, concealed depressive features are often not suspected. Recognition of the presence of such underlying pathology in all children, from infancy through adolescence, including those with mental handicaps, is essential for choice and direction of the therapeutic approach.

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REFERENCES

1. Keeler, W. R. Children's Reactions to the Death of a Parent. In *Depression*. Hoch, P. H. and Zubin, J., Eds. Grune & Stratton, New York, 1954, p. 116.
2. Toolan, J. M. Suicide and Suicidal Attempts in Children and Adolescents. *Am. J. Psychiat.*, 118: 719, 1962.
3. Glaser, K. Suicide in Children and Adolescents. In *Acting Out—Theoretical and Clinical Aspects*. Abt, L. E. and Weissman, S. L., Eds. Grune & Stratton, New York, 1965, p. 87.
4. Glaser, K. Suicide—A Form of Rebellion in the Adolescent. Paper presented at the Sixth International Congress of Child Psychiatry, Edinburgh, 1966.
5. Lourie, R. S. Clinical Studies of Attempted Suicide in Childhood. *Clin. Proc. Child Hosp.*, 22: 163, 1966.
6. Freud, A. Normality and Pathology in Childhood. International Universities Press, New York, 1965, pp. 158-159.
7. Spitz, R. A. and Wolf, K. M. Anacistic Depression: An Inquiry into the Genesis of Psychiatric Conditions in Early Childhood. *Psychoanalytic Study of the Child*, Vol. 2. International Universities Press, 1946, p. 313.
8. Patton, R. G. and Gardner, L. I. *Growth Failure in Maternal Deprivation*. C. C. Thomas, Springfield, Ill., 1963.
9. Goldfarb, W. Effects of Psychological Deprivation in Infants and Subsequent Stimulation. *Am. J. Psychiat.*, 102: 18, 1945.
10. Bowlby, J. *Maternal Care and Mental Health*. WHO Monograph Series No. 2, 1951.
11. Glaser, K. and Eisenberg, L. Maternal Deprivation. *Pediatrics*, 18: 626, 1956.
12. Agras, S. The Relationship of School Phobia to Childhood Depression. *Am. J. Psychiat.*, 116: 533, 1959.
13. Wertz, F. J. Adolescent Underachievers—Evaluating Psychodynamic and Environmental Stresses. *N. Y. State Med.*, 63: 3524, 1963.
14. Silverman, J. S., Fite, M. W., and Mosher, M. M. Clinical Findings in Reading Disability Children—Special Cases of Intellectual Inhibition. *Am. J. Orthopsychiat.*, 29: 298, 1959.
15. Aichhorn, A. *Weyward Youth*. Viking Press, New York, 1935, pp. 92 ff. and 41 ff.

The literature of depression probably constitutes the literature of pathology, for depression is as ubiquitous as human life, it's influence depression to a greater or lesser degree, for longer or shorter periods of time. We traverse, in the words of the poet, "this vale of tears." Opposite or in-between states, but for the greater masses unfortunately, sadness rather than gladness appears to be the dominant mood. I am sure that my brief stops in the Near, Middle, and Far East, and a few summers are making me see through the glass a little more clearly.

It is also true that depression can be more or less violent, or it might well cut truly and row, or it might merely denote a transitory façade, or it might be seen from the outside, or it might denote the depths of despair actually lurking below. For this reason, it is more desirable to consider depression as a phenomenon as on a continuum. In any case, this is the vantage point of the reader.

I shall be less concerned here with specific nosologic categories of depressive syndromes than with depression as a parameter of personality and human behavior. In this light, then, masked depression can be perceived as part of the continuum which occurs, most of the depressive spectrum, that is, that section immediately preceding the point at which depression achieves visibility. This, however, is misleading because it is always possible for depression to be disguised by other symptoms or, for that matter, for some manifestations of depression to conceal much more that cannot be discerned. As manifested to itself, as manifested to others, and for example, it is possible for some depression to be handled in the guise of a depressive equivalent, perhaps as anger and psychosomatic condition, and yet for still more to remain unexpressed, to some extent, to the outside observer. I shall

* Presented at the **Seventh Emil A. Gutheil Memorial Conference of the Association for the Advancement of Psychotherapy**, New York City, October 30, 1966.
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EXHIBIT I



Marshall J. Hartman
Deputy Defender

ILLINOIS STATE APPELLATE DEFENDER
CAPITAL LITIGATION DIVISION
600 W. Jackson, Ste. 600
Chicago, IL 60661
Tel: 312.814.5100
Fax: 312.814.5951

Theodore A. Gottfried
State Appellate Defender

May 4, 1998

Mr. Michael Cheronis
Attorney at Law
1332 W. 55th Street
La Grange, IL 60525

RE: People v. Darrin Shatner

Dear Mike:

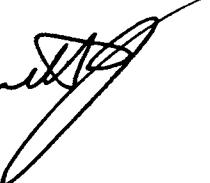
Enclosed is a direction to you from Darrin Shatner to turn over your case file to me for purposes of pursuing his petition for post-conviction relief.

I understand that, notwithstanding our discussion several weeks ago concerning the investigator's examination of your file, that you have since called Marshall Hartman and told him that you would not allow the investigators to come out and examine the file.

I hope that in any event given this direction from Darrin, you will provide access to that file by my investigators as soon as possible.

Please advise me as soon as possible as to your position with respect to this matter.

Very truly yours,


William A. Barnett, Jr.

WAB:pb

4-6-98

Dear Mr. Charonius

I hope all is well with you your wife. & 2. children, ?
as for my self I am as well as can be.
for when I am, I ask humbly for you
to turn my case file over to my lawyer
Bill, (William) Barnett, as it is in great
need at this time in order to file Post
Conviction,

I'm not quite certain what it is only that
it is a file on my case. that only you know.
I'm trying to get out of here & 2nd place.
let me have a copy as soon as possible.
I hope all turn out well, I am certain
some how it will. for you, you have
my best wishes,

Take care.

yours truly

Dennis Spitzer